CLAIM AMENDMENTS

1-5. (Cancelled)

6. (Currently Amended) A method of designing a bore hole tool assembly ~~in accordance with any one of claims~~comprising a housing and a mandrel reaching along an axial direction into the housing and a bearing system for transferring an axial load between the housing and the mandrel and allowing rotation of the housing relative to and about the mandrel, wherein the bearing system comprises at least two bearing stages each arranged to transfer part of the axial load, whereby each bearing stage comprises bearing means and mitigation means for distributing the load substantially proportionally over the respective bearing stages, the method comprising the steps of:

a) selecting a first bearing stage stiffness value for one bearing stage;

b) calculating, for given stiffness values of the parts of the housing that stretch between the bearing stages and given stiffness values of the parts of the mandrel that stretch between the bearing stages, the value for the second bearing stage stiffness whereby the axial load is distributed substantially proportionally over the respective bearing stages, thereby using the first bearing stage stiffness value as input.

7. (Original) The method according to claim 6, wherein step b. comprises:

b1) determining a first stiffness ratio being the quotient of said first bearing stage stiffness and the stiffness of the housing;

b2) determining a second stiffness ratio being the quotient of said first bearing stage stiffness and the stiffness of the mandrel.

8. (New) The method according to claim 6, wherein the mitigation means comprises deformable means having a mechanical stiffness, arranged to transfer at least part of the axial load in series with the respective bearing means.

9. (New) The method according to claim 8, wherein the mechanical stiffness of said deformable mitigation means in at least one of said at least two bearing stages is lower than that of the housing and that of the mandrel in a section bridged by that bearing stage.

10. (New) The method according to claim 8, wherein the mechanical stiffness of said deformable mitigation means in each bearing stage is between 0.25 and 2.5 times per

bearing stage lower than the lowest value out of the stiffness of the housing and the stiffness of the mandrel.

11. (New) The method according to claim 8, wherein the mechanical stiffness of said deformable mitigation means in at least one of said at least two bearing stages is different in magnitude from that of the deformable mitigation means in the other of said at least two bearing stages.

12. (New) The method according to claim 8, wherein the mechanical stiffness of said deformable mitigation means in at least one of said at least two bearing stages is different in magnitude from that of at least one other of said at least two bearing stages.

13. (New) The method according to claim 6, wherein the mechanical stiffness of the part of the housing spanning between said at least two bearing stages, and the mechanical stiffness of the part of the mandrel spanning between said at least two bearing stages differ from each other a factor smaller than 3.

14. (New) The method according to claim 6, wherein the mandrel is a tubular end.

15. (New) The method of claim 14, wherein the housing is a tubular end.

16. (New) The method according to claim 7, wherein the mitigation means comprises deformable means having a mechanical stiffness, arranged to transfer at least part of the axial load in series with the respective bearing means.

17. (New) The method according to claim 16, wherein the mechanical stiffness of said deformable mitigation means in at least one of said at least two bearing stages is lower than that of the housing and that of the mandrel in a section bridged by that bearing stage.

18. (New) The method according to claim 16, wherein the mechanical stiffness of said deformable mitigation means in each bearing stage is between 0.25 and 2.5 times per bearing stage lower than the lowest value out of the stiffness of the housing and the stiffness of the mandrel.

19. (New) The method according to claim 16, wherein the mechanical stiffness of said deformable mitigation means in at least one of said at least two bearing stages is different in magnitude from that of the deformable mitigation means in the other of said at least two bearing stages.

20. (New) The method according to claim 16, wherein the mechanical stiffness of said deformable mitigation means in at least one of said at least two bearing stages is different in magnitude from that of at least one other of said at least two bearing stages.

21. (New) The method according to claim 7, wherein the mechanical stiffness of the part of the housing spanning between said at least two bearing stages, and the mechanical stiffness of the part of the mandrel spanning between said at least two bearing stages differ from each other a factor smaller than 3.

22. (New) The method according to claim 7, wherein the mandrel is a tubular end.

23. (New) The method of claim 22, wherein the housing is a tubular end.